UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,558	01/23/2002	Masakazu Murata	Q68146	4922

7590 01/03/2005

SUGHRUE, MION, ZINN
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER	
PEREZ, ANGELICA	
ART UNIT	**PAPER NUMBER**
2684	

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,558	MURATA, MASAKAZU	
	Examiner	Art Unit	
	Angelica M. Perez	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08/13/2004 and 11/17/03*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

RESPONSE TO AMENDMENT

Response to Arguments

1. Applicant's arguments filled 09/03/2004 have been considered but they are not persuasive.

2. In the remarks, the applicant argued in substance:

(A) On page 10, lines 3-18, "Ramaswamy does not teach of an internal power source and an external power source in a wireless communication terminal, as claimed."

In response to argument (A), the examiner points where claim 1, broadly interpreted does not specifically suggests "an internal power source and an external power source in a wireless communication terminal." Claim 1 reads, "wireless communication circuitry for establishing a wireless communication channel to a network; an internal power source and an external power source...". The claim does not specifically read where the "an internal power source and an external power source" are physically located in the communication terminal. The existence of them is acknowledged; however, they do not necessarily have to exist within the communication device itself.

(B) On page 10, lines 3-18, "The wireless handset (120_1) in Ramaswamy only has a rechargeable handset battery (123) and does not include an external power source."

In response to argument (B), the examiner showed where the "AC power supply" corresponds to the "external power source" and the "rechargeable handset battery" battery corresponds to the "internal power source".

(C) On page 10, lines 3-18, "Ramaswamy does not teach at least monitoring the external power source and sending a message from the wireless communication circuitry to the network when the communication terminal is operating with the internal power source"

In response to argument (C), the examiner points in the rejection "where the flag indicates of a power failure and informs of the level of inactivity/activity of the backup battery"; where the activity/inactivity of the backup battery informs of "operating with the internal power source".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramaswamy (Ramaswamy et al.; US Patent No.: 6,668,178 B1) in view of Gerdisch (Gerdisch, Mitchell R.; US Patent No.: 6,480,727 B1).

Regarding claims 1, 7 and 13, Ramaswamy teaches of a wireless communication method (column 4, lines 61-67), network (column 2, lines 41-45) comprising: a base station (figure 1, item 110); a base station controller connected to the base station (figure 1, item 110; where a BSC is inherent of a BS); wireless communication terminal (column 1, lines 49-50;e.g., "wireless handsets") comprising: wireless communication circuitry for establishing a wireless communication channel to a network (column 1, lines 50-52; where the transceiver provides the means to link the terminal to a network through a channel) and internal power source and an external power source (column 1, lines 57-62; e.g., "battery power supply " corresponding to an internal power source and "AC power" corresponding to an external power source); control circuitry for energizing the wireless communication terminal with the external power source and energizing the wireless communication terminal with the internal power source when the external power source is faulty (column 2, lines 46-51; where it is inherent in the art to posses the circuitry to perform the function of providing backup power when AC power supply fails);

Ramaswamy does not necessarily teach of monitor circuitry for monitoring the external power source and sending a message from the wireless communication circuitry to the network when the communication terminal is operating with the internal power source.

In related art concerning using inactivity levels to extend subscriber's equipment battery life, Gerdisch teaches of monitor circuitry for monitoring the external power source and sending a message from the wireless communication circuitry to the

network when the communication terminal is operating with the internal power source (column 2, lines 1-20; where the flag indicates of a power failure and informs of the level of inactivity/activity of the backup battery).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Ramaswamy's method, network and terminal with internal and external power source with Gerdisch's communicative circuitry in order to preserve internal unit power when a power outage occurs.

Regarding claim 2, 8 and 14, Ramaswamy in view of Gerdisch teaches all the limitations of claim 1. Gerdisch further teaches where the monitor circuitry transmits the message when no call is in progress (column 2, lines 7-11; where the inactivity level indicates no call in progress) and transmits a second message from the wireless communication circuitry to the network when the communication terminal is operating with the internal power source when a call is in progress (column 2, lines 15-20; where the "incremental registration" is required due to use of the unit; e.g., "call in progress").

Regarding claim 3, 9 and 15, Ramaswamy in view of Gerdisch teaches all the limitations of claim 1. Gerdisch further teaches where the message indicates that the internal power source is producing a voltage which is lower than a critical level (column 6, lines 33-39; see also table 2; where the status).

Regarding claim 4, 10 and 16, Ramaswamy in view of Gerdisch teaches all the limitations of claim 2. Gerdisch further teaches where the second message indicates that the internal power source is producing a voltage which is lower than a critical level (column 6, lines 33-39; see also table 2;).

Regarding claim 5, 11 and 17, Ramaswamy in view of Gerdisch teaches all the limitations of claim 2. Gerdisch further teaches where the wireless communication channel is a fixed wireless access (FWA) channel (column 1, lines 26-29; where fixed access units communicate through "FWA channels").

Regarding claims 6, 12 and 18, Ramaswamy in view of Gerdisch teaches all the limitations of claim 5. Gerdisch further teaches where the messages are sent in a data format specified by ANSI/(American National Standard Institute)/TIA (Telecommunications Industry Association)/EIA (Electronic Industries Alliance)-95B standard (column 3, lines 11-15; where "IS-136 corresponds to EIA/TIA standard).

5. Claims 19, 21-24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramaswamy in view of Gerdisch and further in view of Gibbons et al. (Gibbons, US Pub. No.: 2001/0053710 A1).

Regarding claims 19 and 27, Ramaswamy in view of Gerdisch teaches all the limitations of claims 1 and 13, respectively.

Ramaswamy in view of Gerdisch does not necessarily teach where the message indicates an operation state of the wireless communication terminal.

In related art, concerning a remote wireless unit having reduced power operating mode, Gibbons teaches where the message indicates an operation state of the wireless communication terminal (paragraphs 13, 14 and 15; where the remote unit reports the operational status to the base station. Where the status refers to different modes, which in turn correspond to the "state of the wireless communication terminal").

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Ramaswamy in view of Gerdisch method, network and terminal with internal and external power source with Gibbons's states of operation in order to enable the base station to be aware that a remote unit is operating in a sleep mode so that appropriate actions can be taken by t the base station to "assure that calls can be completed to the remote unit", as taught by Gibbons.

Regarding claims 20 and 28, Ramaswamy teaches all the limitations of claims 1 and 13, respectively. Gibbons further teaches where the message is stored in the network (paragraph 10, lines 1-6; e.g., "...database that stores the current operation mode of each remote in the system").

Regarding claim 21, Ramaswamy in view of Gerdisch teaches all the limitations of claim 7.

Ramaswamy in view of Gerdisch does not necessarily teach where the message indicates an operation state of the wireless communication terminal.

In related art, concerning a remote wireless unit having reduced power operating mode, Gibbons teaches where the message indicates an operation state of the wireless communication terminal (paragraphs 13, 14 and 15; where the remote unit reports the operational status to the base station. Where the status refers to different modes, which in turn correspond to the "state of the wireless communication terminal").

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Ramaswamy and Gerdisch's method, network and terminal with internal and external power source with Gibbons's states of operation in

order to enable the base station to be aware that a remote unit is operating in a sleep mode so that appropriate actions can be taken by t the base station to "assure that calls can be completed to the remote unit", as taught by Gibbons.

Regarding claim 22, Ramaswamy in view of Gerdisch teaches all the limitations of claim 7.

Ramaswamy in view of Gerdisch does not necessarily teach where the base station controller further comprises a memory device storing the message.

In related art, concerning a remote wireless unit having reduced power operating mode, Gibbons teaches where the base station controller further comprises a memory device storing the message (paragraph 10; where the database provides the storage of the data).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Ramaswamy and Gerdisch's's method, network and terminal with internal and external power source with Gibbons's memory device storing the message in order to maintain records of the operational states of the remote units, as taught by Gibbons.

Regarding claim 23, Ramaswamy in view of Gerdisch and further in view of Gibbons teaches all the limitations of claim 22. Gibbons further teaches of comprising a maintenance terminal analyzing a collection of the messages stored in the memory device (paragraph 9; e.g., where the analysis is done when checking for the functional state in order to "ensure that calls are completed to a remote unit").

Regarding claim 24, Ramaswamy in view of Gerdisch teaches all the limitations of claim 7.

Ramaswamy in view of Gerdisch does not necessarily teach of comprising a maintenance terminal analyzing a collection of the messages.

In related art, concerning a remote wireless unit having reduced power operating mode, Gibbons teaches of comprising a maintenance terminal analyzing a collection of the messages (paragraph 9; e.g., where the analysis is done when checking for the functional state in order to "ensure that calls are completed to a remote unit").

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Ramaswamy and Gerdisch's's method, network and terminal with internal and external power source with Gibbons's memory device storing the message in order to maintain records of the operational states of the remote units, as taught by Gibbons.

6. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramaswamy in view of Gerdisch as applied to claims 24 and 7 above, and further in view of Bernard (Bernard, Bruce; US Patent No.: 6,625,281 B1).

Regarding claim 25, Ramaswamy in view of Gerdisch and further in view of Gibbons teaches all the limitations of claim 24.

Ramaswamy in view of Gerdisch and further in view of Gibbons does not teach where the maintenance terminal distinguishes a power turn-off event that occurs when no call is in progress from a power turn-off event that occurs when a call is in progress.

In related art, concerning a method for extending the useful life of a cordless telephone backup battery during a power outage condition, Bernard teaches where the maintenance terminal distinguishes a power turn-off event that occurs when no call is in progress from a power turn-off event that occurs when a call is in progress (column 3, lines 21-35; where "when a call is not in progress...the base unit sends a sleep command to the handset..."; where the mode is changed accordingly if a call is or is not in progress).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Ramaswamy's, Gerdisch's and Gibbons combined method, network and terminal with internal and external power source with Bernard's distinguishes a power turn-off event that occurs when no call is in progress from a power turn-off event that occurs when a call is in progress in order to be able to save powder by setting the base unit to different modes, as taught by Bernard.

Regarding claim 26, Ramaswamy in view of Gerdisch teaches all the limitations of claim 7.

Ramaswamy in view of Gerdisch does not teach where the maintenance terminal distinguishes a power turn-off event that occurs when no call is in progress from a power turn-off event that occurs when a call is in progress.

In related art, concerning a method for extending the useful life of a cordless telephone backup battery during a power outage condition, Bernard teaches where the maintenance terminal distinguishes a power turn-off event that occurs when no call is in progress from a power turn-off event that occurs when a call is in progress (column 3,

lines 21-35; where "when a call is not in progress...the base unit sends a sleep command to the handset..."; where the mode is changed accordingly if a call is or is not in progress).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Ramaswamy's and Gerdisch's method, network and terminal with internal and external power source with Bernard's distinguishes a power turn-off event that occurs when no call is in progress from a power turn-off event that occurs when a call is in progress in order to be able to save powder by setting the base unit to different modes, as taught by Bernard.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent No.: 6,181,916 B1, refers to mode changing method in power failure situations.

US Patent No.: 5,870,685 A, refers to power operations management on battery capacity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

Angelica Perez
(Examiner)

NAY MAUNG
SUPERVISORY PATENT EXAMINER

December 23, 2004

Art Unit 2684